

The Identity of the Contemporary Public Library. Theories for a Holistic Perspective of Interpretation

Maurizio Vivarelli*

Library is a growing organism
S.R. Ranganathan, 1931

1. Points of view. Public library and its identity

One of the most debated topics in the last years, is no doubt the analysis of the many factors changing the identity of the contemporary public library, from its conceptual model to its architectural shape, from its documentary features to organising and managing procedures, analysed from the different points of view that can be assumed in the general scope of library science¹. Hence this implies the definition and adoption of tools to evaluate and interpret the new contexts which are beginning to be outlined, and that entail the production and communication of information and knowledge, the nature of collections, the cognitive profiles of users and their styles of use, the new anthropological fields which must be taken into account so as to envisage, conceive and manage public libraries firmly rooted in their cultural, social and documentary environment. The radical

* Dipartimento di Studi storici, Università di Torino. Email address maurizio.vivarelli@unito.it. This paper re-elaborates contents partially outlined in: *Specie di spazi. Alcune riflessioni su osservazione e interpretazione della biblioteca pubblica contemporanea*, «AIB studi», 54, 2014, 2/3, p. 181-199. DOI: 10.2426/aibstudi-10134. Web site last accessed: December 12, 2015.

1 An ample section devoted to a bibliographic framework on the matter, can be found in ANNA GALLUZZI, *Libraries and Public Perception: A Comparative Analysis of the European Press*, London, Chandos, 2015, especially in chapter 1, *Wondering about the future of libraries*, which also recalls a survey made by the American Libraries Association and relative to the period between 1998 and 2009.

nature of the ongoing transformations, however, makes the task library science is forced to take on really difficult and problematic, and this also implies the fact, at least obvious to the writer, that interdisciplinarity will become the necessary road we must take with true conviction, leaving all rhetoric behind. If one were to slightly simplify this argument one could state that, until not long ago, the quantitative import of the various service indicators was believed to be, on its own, a criterion one could base library assessment on, whose «effectiveness», whose ability to reach the goals set, was the clear, explicit, shared purpose to pursue, and on which the level of social legitimacy the library itself was able to achieve depended. A partial dematerialisation of the concept of collection, advancing new anthropological demands no longer based on the quality of custom services alone, a fragmentation of the models organising knowledge have raised a battery of problems, which not only regard the institutional public library as historically outlined since the first half the 19th century, but which also delve into the intimate nature of the concept of 'library' since its foundation in the early modern age, at least insofar as the cultural history of Europe is concerned². Moreover, the progressive definition of these problematic fields involves not only LIS studies or, in its more general aspects, the evolution of the models of selection, management and transmission of registered knowledge. It also affects the symbolic and metaphoric nature of libraries, which in its many visual and textual ramifications is at the heart of a wide connective tissue of relationships, them too culturally and historically defined. It is interesting to note, in that respect, that also in a recent film directed by Christopher Nolan (*Interstellar*, 2014), the library plays a very prominent role: it is indeed the communication surface of a small home library which is the place for contact and mediation with the complex space-time environment the lead character must venture in (Fig. 1). This simple and ultimately obvious realisation, however, further and significantly confirms how vital the conceptual and metaphorical dimension of a library can be, in its multifaceted dimensions, partly afferent to the limited confines of library science, and, to a much more relevant degree, to the wider and thick cultural and communicative context, that the library, since its farthest and mythical origins, certainly is no irrelevant part of.

2 For a general introduction to these topics an excellent approach is PETER BURKE, *A Social History of Knowledge: From Gutenberg to Diderot*, Cambridge, Polity Press, 2000, and *A Social History of Knowledge Volume II: From the Encyclopédie to Wikipedia*, Cambridge, Polity Press, 2012. On the crisis of the historical and institutional public library model a fundamental reference is PAOLO TRANIELLO, *Biblioteche e società*, Bologna, Il Mulino, 2005.



Fig. 1 - Picture taken from *Interstellar*, directed by Cristopher Nolan, 2014.

Therefore, the library form takes on an important narrative role in *Interstellar* (but there could be many more examples), and this means that this form, in its historically and morphologically determined identities, still holds a relevant semantic and expressive potential, which is worth identifying, outlining, discussing, also exploring the heuristic possibilities of an oblique gaze, attempting to intersect the principles and methodologies rooted in the scope of library science with other imports, which would hopefully strengthen interpretative competences.

The specific purpose of this paper is to posit a string of considerations on the contemporary public library identity, on the *kind* of its physical and metaphorical *spaces*³; the object of this examination consists in its beginnings (well-rooted before the postmodern whirlwind), from the 'public' library in the sense scholar and librarian Luigi Crocetti (1929-2007) identified twenty years ago, i.e. a 'general', 'free', 'contemporary' one⁴. The perspective here proposed basically intends to observe the library from the inside, analysing, in general, all the traces of the different phenomena taking place within the uncertain boundaries of its space. With the expression 'library space', we shall here refer to the architecturally defined morphology of space, to the informative and documentary aspects of such space, and to its exten-

3 The reference, clearly, is to the book by GEORGES PEREC, *Species of Spaces and Other Pieces*, London, Penguin, 1999 (*Espèces d'espaces*, 1974).

4 LUIGI CROCETTI, *Pubblica*, in: *Il nuovo in biblioteca e altri scritti*, Roma, Associazione italiana biblioteche, 1994, p. 49-57, also published in *La biblioteca efficace. Tendenze e ipotesi di sviluppo della biblioteca pubblica negli anni '90*, a cura di Massimo Cecconi, Giuseppe Manzoni, Dario Salvetti, Milano, Editrice Bibliografica, 1992, p. 15-21.

sions in the digital environment⁵. We shall therefore examine many elements of a heated national and international debate on these topics, well aware of their wide scope and complexity, which certainly make a thorough and complete discourse difficult to pursue. This is why we shall preliminarily outline the structure of this paper, and the principles and methods used. First of all, by the term 'identity', whose polysemy is blatant, we shall refer to the features all the subjects attribute to the library, in order to identify its role, functions and special services. Leaving the intricate philosophical and lexicographic matters characterizing the concept and term in the background, we could define 'identity' as all the qualities pertaining to the library, which make a library, at least according to the use in the natural language, 'identical' to a conceptual and abstract model outlining its form. Identity, therefore, in a nutshell, indicates the «perfect equality» between two entities. Amongst the multiple meanings described in Treccani *Vocabolario*, for the Italian word 'identità', the closest ones to this linguistic use are two. The former is the one stating, about personal identity, that it consists "in being that one and not another". Hence, identity is what is established and proved through the correspondence between the subject's features and the elements described in a specific document, which is not coincidentally called 'document' or identity 'card'. The latter, stemming from the psychological and psychoanalytical field, defines identity as "the sense and self-awareness as an entity different from the others and persistent in time", and as "continuity of one's self"; and when the awareness of these elements diminishes there is an "identity crisis"⁶. We can then affirm that the library 'is' something (public, social, digital, participatory etc.), and that this 'something' identifies, specifies, differentiates, characterises its identity, physiognomy or, daring an even more idealistic term, its essence. The qualities associated to the library originally depend on an aesthetic act; it is on the preliminary basis of a perception that we come to formulate a judgement, be it personal, social, or one elaborated within a disciplinary field; and this judgement ultimately is of a relational nature, like when we state something is identical to itself: also in this case there is a reference - i.e. a relation -, even if a circular one. For this reason, in the end, we say that the library is something, and not something else; for this reason we can state that the library in its uniqueness corresponds to its prototype; finally, for this reason

5 On other occasions I defined this triple articulation of space with expressions such as architectural space, bibliographic space, digital space: cf. in this respect *Lo spazio della biblioteca. Culture e pratiche del progetto tra architettura e biblioteconomia*, a cura di M. Vivarelli; collaborazione di Raffaella Magnano; prefazione di Giovanni Solimine; postfazione di Giovanni Di Domenico, Milano, Editrice Bibliografica, 2013, especially in the chapter *Lo spazio della lettura*.

6 *Vocabolario*, in Treccani.it, <<http://www.treccani.it/vocabolario/>>, s.v.

we are authorised to believe one library is identical to another. In this way, we actually go back to what Aristotle had argued about the term *tautôtēs* (which indeed corresponds to 'sameness'), when he wrote that «sameness is a unity of the being either of more than one thing or of one thing when it is treated as more than one, i.e. when we say a thing is the same as itself; for we treat it as two»⁷.

Leaving for now the linguistic and especially epistemological issues we have cursively hinted at in the background, the topic of the identity of contemporary public libraries will be tackled preliminarily in connection with what is said of it, in a period of deep transformations which have long been changing its paradigmatic profile. In paragraph 2, first of all, a concise review of all the interpretative angles on this matter will be proposed, clearly showing the articulated outline of the debate; as we shall see, (too?) many things can be said about a library; ideal, ideological and ethical options, sometimes radically divergent ones, are compared. Paragraph 3 deals with the specific matter of measuring and assessing the services the library provides. On this matter, it is interesting to note, first of all, a sort of epistemological shift wherein evaluation techniques, originally aimed at acquiring pieces of information useful for the management in a concrete and empirical fashion, are invested with the difficult task to qualify as principles and methods with their autonomous and steady cognitive independence. As we shall see, when we change from the framework of library management to the one of social librarianship, ultimately, we start to feel the need for methodologically and heuristically adequate tools to better understand the characteristics of an object, the library, whose complexity can no longer be analysed in light of techniques based on theoretical premises, whose strength is crippled by many pitfalls. In paragraph 4 we shall discuss and argue the need to broaden our scope of analysis, metaphorically moving towards the limits of library science, as it is historically known. In my opinion, indeed, following this argumentative path, there is a growing awareness that the focus of the debate is not only the public library model and its sometimes approximating postmodern versions. In fact, the focal point of the research turned out to be the idea of the library itself, as a place where the *words* of knowledge find a conceptual and material order in the *things* that books are. For this we need a long-term perspective, which would steadily see the changing factors beyond the fashions and contingencies that often simply dull their perception, banishing them to a limbo conceived as a sombre past, naively opposed to the shiny novelties of an Eden-like future. We shall here out-

7 ARISTOTLE, *Metaphysics*, in *The Complete Works of Aristotle. Volume Two*, edited by Jonathan Barnes, Princeton NJ, Princeton University Press, 1984, V, 9, p. 1607. On these topics refer to classic EMANUELE SEVERINO, *Tautôtēs*, Milano, Adelphi, 2009.

line the general tenets of the suggested methodology, that finds an important turning point first in Edmund Husserl famous *epochè*, and that is then coupled with some themes in the reflection of Georges Perec, Albert-László Barabási and Gregory Bateson, and that consists in trying to interpret the phenomena taking place within the library, in their peculiar uniqueness, from a basically unifying and holistic perspective. The choice of these authors, and of some elements of their reflection, seems to me important, not only for their intrinsic value, but because it encourages library science, in its specific disciplinary configuration, not to sever all connections with other disciplinary fields. It would then avoid the risk of a self-referential homogenisation, that would otherwise lead it to attempt to hoist itself from the swamp it is stuck in, acting like Baron Münchhausen, who in the famous pages by Rudolph Graspe (1736-1794) tries to lift himself up finding support, circularly, only on his own hair (Fig. 2).



Fig. 2 - Baron Münchhausen trying to hoist himself from the swamp by pulling his hair.
 Postcard collection by Oskar Herrfurth (detail).
 Source: <<http://www.goethezeitportal.de>>.

Paragraph 5 describes the methodology applied to the analysis of three Tuscan libraries, whose partial results are described in the paper by Maria Pagano in this volume.

It is difficult to foresee in a detailed way what the overall outcome achieved might be. The first impression – which excludes any form of utopianism, rest assured –, regarding the convictions and hypotheses this work stems from, is that in the past years a deeper and deeper rift has opened up between academic and professionals cultures and library use practices: people in libraries behave and use cognitive styles very differently from what provided by the structural configuration of models, and from their normative and predictive characters. For this reason I believe it is useful to try and go beyond this «impression», and verify if, going back to the phenomena, it is possible to better understand what causal links can be inferred.

Finally, one clarification. The path whose theoretical premises, methodological elements and applicable practices are shown in this study, has, at this stage, its own independent configuration, which is in essence linked to research lines I have pursued in the last years, which will be accounted for case by case. The further perspective is to build up a mixed Italian and Spanish research group, with whom to establish a common ground to carry on the study activity, strengthening and explaining its methodology and expanding its specific territorial range.

2. Library /libraries

This paragraph outlines the debate sparked in Italy in the last years, which discussed the identity of the library and libraries, public ones in the sense previously recalled, examining both studies by Italian authors and evaluating the reception contexts of other authors. In order to determine, also according to current rhetorical usage, this specific research field, it is necessary to also make a series of considerations on the general concept of 'library', on the problematic and complex elements marking its historically defined identity, in a time whose changes have no less than weakened the paradigm of Anglo-American public library and that of the reference library closely connected to it. They have written extensively on these topics, and the general lines of the debate in Italy shall here be very briefly recalled. In general, and in an oversimplification of the reasoning, it is safe to say that the discussion developed along some main guidelines. Along an axis, whose genealogy can be traced back to Paolo Traniello's book *Biblioteche e società*, the historical, juridical, institutional motivations leading to the abatement of the conceptual model of the traditional public library have been explored. From another point of view, which I would essentially connect to the studies by Alberto Petrucciani and Riccardo Ridi, the similarities remarked within the conceptual area of Anglo-Saxon librarianship and library science were emphasised. As

a result, the reasoning focused, on the one hand, on the historically outlined figure of the librarian, and, on the other, on positing a normative and binding framework which defines that action, anchoring it, with the developing professional practices, in a prescriptive code of conduct rigidly regulating its scope of action. Anna Galluzzi, with her *Biblioteche nella città*, has tried to discuss the reasons of this crisis considering them against the wider social, economical and cultural dynamics amplifying its context, regulating their reasons within social librarianship (biblioteconomia sociale), as Giovanni Solimine and Chiara Faggiolani have recently elaborated and opined⁸. Basically bordering on this area, and crossing political and ethical tensions on one side, and service marketing on the other, there is the model of the social library as a metaphorical neutral and mostly democratic «square», which was published by Antonella Agnoli, and which found in Sergio Dogliani's Idea Store an example of validation and, especially, an objective and desired identification. In this line of opinions we may include, in the architectural field, Marco Muscogiuri's reflections and design proposals⁹. Interesting critical options, in many ways standing out of the crowd, aimed at emphasising more extensively epistemological and methodological issues, have been proposed by Giovanni Di Domenico and Alberto Salarelli¹⁰. To this argumentative ground, and customarily apologising for the self-reference, I believe some of my studies could be added, wherein, rather than positing a

8 Cf., in the order in which they are referred to in the text, P. TRANIELLO, *Biblioteche e società*; ALBERTO PETRUCCIANI, *Biblioteca pubblica senza identità? No, grazie*, «Bollettino AIB», 46, 2006, 4, p. 377-382; RICCARDO RIDI, *Biblioteconomia e organizzazione della conoscenza: quattro ipotesi fondazionali*, in *1. seminario nazionale di biblioteconomia* [...] a cura di Alberto Petrucciani e Giovanni Solimine, Milano, Ledizioni, 2013, p. 101-110, in «E-LIS», <<http://eprints.rclis.org/20958/>> and *Sulla natura e il futuro della biblioteca pubblica. Lettera aperta a Claudio Leombroni*, «Bollettino AIB», 46, 2006, 1/2, p. 87-90, <<http://bollettino.aib.it/issue/view/348/showToc>>, also in «E-LIS» <<http://eprints.rclis.org/handle/10760/8593>>; A. GALLUZZI, *Biblioteche per la città. Nuove prospettive di un servizio pubblico*, Roma, Carocci, 2009 and *Il futuro della biblioteca pubblica*, «Bollettino AIB», 46, 2006, 1/2, p. 227-234; G. SOLIMINE, *Nuovi appunti sulla interpretazione della biblioteca pubblica*, «AIB studi», 53, 2013, 3, p. 261-271; G. SOLIMINE - CHIARA FAGGIOLANI, *Biblioteche moltiplicatrici di welfare*, «Biblioteche oggi», 31, 2013, 3, p. 15-19; A. GALLUZZI - C. FAGGIOLANI, *L'identità percepita delle biblioteche: la biblioteconomia sociale e i suoi presupposti*, «Bibliotime», 18, 2015, 1, <<http://www.aib.it/aib/sezioni/emr/bibtime/num-xviii-1/galluzzi.htm>>.

9 Cf., by ANTONELLA AGNOLI, *Le piazze del sapere. Biblioteche e libertà*, Roma-Bari, Laterza, 2009 and *La biblioteca che vorrei. Spazi, creatività, partecipazione*, Milano, Editrice Bibliografica, 2014; by SERGIO DOGLIANI, *La (mia) verità su Idea Store*, «Bollettino AIB», 49, 2009, 2, p. 259-267; by MARCO MUSCOGIURI *Biblioteche. Architettura e progetto: scenari e strategie di progettazione*, Rimini, Maggioli, 2009.

10 Cf. G. DI DOMENICO, *Conoscenza, cittadinanza, sviluppo: appunti sulla biblioteca pubblica come servizio sociale*, «AIB studi», 53, 2013, 1, p. 13-25; ALBERTO SALARELLI, *Pubblica 2.0*, «Bollettino AIB», 49, 2009, 2, p. 247-258.

model, I try to define a framework for the phenomena taking place in the library space, following a perspective, which, since it chooses not to deal with practical matters, we may define of a more correctly and specifically interpretative nature. A further perspective is provided by the studies discussing the relations between library traditional models and those changes induced by the dissemination of digital cultures and technologies; in this sense, we should mention at least the import of Riccardo Ridi, Anna Maria Tammamaro and, especially after his recent Italian translation, the view championed by David Lankester with his «atlas» of new library science¹¹. Finally, there are some lines of reflection, though not very recent, with a markedly theoretical and historical outlook, whose results are necessarily interlaced, sometimes in a hidden way, with the current debate, in which we may list the studies by Paolo Traniello, Alberto Petrucciani, Giovanni Solimine, Alfredo Serrai, Attilio Mauro Caproni, Piero Innocenti, who have each explored the normative-institutional horizons of the library (or libraries, a not irrelevant matter) seen in its historical dimension¹², the role of librarians¹³, the diachronically-determined relations between spaces and services¹⁴, the foundations of the concept of 'bibliotheca' since the early modern age¹⁵, the issues regarding the mechanisms of knowledge appropriation through the act of reading¹⁶.

11 R. RIDI, *Unified Theory of Information, Hypertextuality and Levels of Reality* (with Claudio Gnoli), «Journal of Documentation», 70, 2014, 3. Preprint available in «Emerald EarlyCite» <<http://www.emeraldinsight.com/journals.htm?issn=00220418&volume=70&issue=3&articleid=17101491&show=abstract>>; ANNA MARIA TAMMAMARO, *Che cos'è una biblioteca digitale*, «DigItalia», 2005, 1, <<http://digitalia.sbn.it/article/view/325/215>>.

12 P. TRANIELLO, *Storia delle biblioteche in Italia. Dall'Unità ad oggi*, Bologna, Il Mulino, 2014.

13 A. PETRUCCIANI, *Libri e libertà. Biblioteche e bibliotecari nell'Italia contemporanea*, Manziana, Vecchiarelli, 2012.

14 G. SOLIMINE, *Spazio e funzioni nell'evoluzione della biblioteca: una prospettiva storica*, in: *La biblioteca tra spazio e progetto: nuove frontiere dell'architettura e nuovi scenari tecnologici: 5a Conferenza nazionale per i beni librari*, Milano, Editrice Bibliografica, 1998, p. 24-56, also published in: *La biblioteca e il suo tempo: scritti di storia della biblioteca*, Manziana, Vecchiarelli, 2004, p. 15-71.

15 See *Storia della Bibliografia. 5: Trattatistica biblioteconomica*, a cura di Margherita Palumbo, Roma, Bulzoni, 1994, p. 146-186 and *Caratteri, insufficienze, ed ambiguità di Storia delle Biblioteche*, in: *Racemationes bibliographicae*, Roma, Bulzoni, 1999, p. 9-44.

16 Refer to ATTILIO MAURO CAPRONI, *La biblioteca e i segni della memoria. La biblioteca, cioè un sistema logico del sapere, La biblioteca come fenomeno della conoscenza*, in: *L'inquietudine del sapere. Scritti di Teoria della Bibliografia*. Nota introduttiva di A. Serrai, Milano, Sylvestre Bonnard, 2007, respectively on p. 171-200, 201-204, 205-2014; PIERO INNOCENTI, *Introduzione*, in: *Passi del leggere. Scritti di lettura, sulla lettura per la lettura ad uso di chi scrive e di chi cita*, con la collaborazione di Cristina Cavallaro, 2 v., Manziana, Vecchiarelli, 2003, p. ix-cxi, especially part 2, *Biblioteca*,

Once this intricate context has been unravelled, we cannot but preliminarily acknowledge the variety and diversity of the views upheld, where, as previously mentioned, the considerations on the conceptual layout of the library in an abstract sense are coupled, and sometimes assimilated, with the ones rooted in and confined to specific fields, or subfields, of application. Therefore, the all but peaceful coexistence of these discordant and opposing theses is in itself a clear and blatant sign of the critical phase we are experiencing. The previous paradigm, in the sense indicated by Thomas S. Kuhn, is gradually fading, and the new one has yet to emerge in its completeness¹⁷. In this scenario, library science, also in its digital extensions, with its tools and its heuristics, mainly offers analysis methods; the practical and professional one seeks, often hastily, immediate practical results, perceived as necessary and undeferrable, in order to tackle impending financial and managerial criticalities. In this way, the enigmatic outlines of a giant puzzle have come into shape, whose many pieces we are not sure if and how to assemble, and on which the ancient, symbolical, mythical image of the labyrinth looms. Indeed, for this reason we believe it is useful to place, on this threshold, the restless figure of Georges Perec, an intellectual who, with his actions, is an excellent example of the liveliness of this and other more general issues. Perec, in his *Preamble to Life a User's Manual*, suggests we identify with the «player» who wants to put back together an image with the discordant pieces of a jigsaw puzzle, for instance an unlikely «three-pointed black hat with its rather ruined black plume», and who at the same time wants to avoid «chance to cover his tracks». The player will have to acknowledge that «the organised, coherent, structured signifying space of the picture is cut up not only into inert, formless elements containing little information or signifying power, but also into falsified elements, carrying false information», and will have to deduce – and us with him – that, an ultimate truth, the jigsaw puzzle is no solitary game, and that «every move the puzzler makes, the puzzle-maker has made before; every piece the puzzler picks up, and picks up again, and studies and strokes, every combination he tries, and tries a second time, every blunder and every insight, each hope and each discouragement have all been designed, calculated, and decided by the other»¹⁸.

In the light of this premise, in which framework can we place the views of analysis, study and research previously exposed? In order to provide further clarification, a summary of the basic elements

macchina per leggere, p. xlvii-lxxxiv.

17 THOMAS S. KUHN, *The Structure of Scientific Revolutions*, Chicago, Chicago University Press, 1962.

18 G. PEREC, *Life a User's Manual: Fictions*, London, Collins Harvill, 1987 (*La vie mode d'emploi*, 1978).

characterising some of these interpretative directions will follow; the former (A-C) mostly entrenched in the professional pragmatic horizon; the latter (D-F) linked to a wider and more articulate theoretical and methodological horizon.

- A. In this first area, more closely related to professional cultures and practices, the goal seems to be initially circumscribed and defined, and the main demand is to anchor library practices in a form essentially derived from Anglo-American tradition. This manifestly pragmatic scope focuses on establishing a set of values, deposited along the line of this tradition, rather than tracing theoretical models with their own independent stability. The elements that characterize this perspective, hinges on the practices believed to be essential to run a library, and first of all on those concerning, in a general sense, the mediation between information and users, which can be summed up by Michael Gorman's «only connect»¹⁹. Thus, mediation is the essential character we find in the principal area of catalogue and reference services, which expresses the main core of the librarian's professionalism and of the principles borne out of this practice.
- B. A second area consists in the field of social librarianship, whose remote genealogies go back to Jesse H. Shera's works²⁰, and the more recent ones of library management, which can be interpreted as the crossroads where classic library science and library management. The sense of the library lies in its being a part and expression of the wider context it belongs to, in its qualifying as a system able to interpret itself as an integral and normative part (also in terms of welfare) of the social body it is a part and expression of.
- C. A third group interprets this vision according to a perspective whose strong ethical-political leanings are coupled with the tools of social marketing. The public library is seen as a «third» place, a «square» or a «social melting pot», able to foster, elaborating them, primary and diffused demands. The symbolical arrangement of the collections is relegated to the background, to the advantage of the priority of diffused and general social relationships, which have little to do with the principles and method developed within the tradition. We may connect to some elements of this perspective the communicative extensions of library cultures, wherein the main topic consists in the ability to dialogue with users, developing «conversations» which ultimately are the added value that library

19 MICHAEL GORMAN, *Our Enduring Values. Librarianship in the 21st Century*, Chicago - London, American Library Association, 2000.

20 Cf., by JESSE H. SHERA, *Sociological Foundation of Librarianship*, London, Asia Publishing, 1970 and *The Foundations of Education for Librarianship*, New York [etc.], Wiley-Becker and Hayes, 1972.

service, in all its forms, is able to offer. Some foundations of this line I reckon can be found in some topics at the heart of David Lankes's *new librarianship*, and in the librarian's role as a «facilitator» posited therein²¹.

- D. A fourth area identifies the key topic in the chances digital cultures and technologies may offer, seen in the prospective ability to provide new models of document organisation and communication.
- E. The theses of those aspiring at an articulate and coherent vision of ongoing phenomena belong to a fifth group, and they develop, with different premises and results, their arguments starting from the topic of complexity.
- F. A sixth area is linked, in a broad sense, to the field of historical-bibliographical research, with some significant disagreements, which qualify some of these positions as: a) the interpretation of the evolution of contemporary public libraries according to a historical-institutional axis; b) the analysis of library history strongly emphasising the role played by the librarian and his/her professional skills; c) the diachronic account of the relations between ideology, model, services and spaces of the library; d) the research aimed at tracing the cultural genealogy of the *bibliotheca* in its foundation in the early modern age; e) the analysis of library purposes with regard to organisation and, especially, of knowledge elaboration.

The discord among ongoing views, as previously also recalled, is blatant. The arguments presented develop from premises and theoretical and methodological viewpoints so different from one another that it is really hard to recognise, in the various pathways, the actual object of study; on the contrary, I may add, the word and concept of 'library' which can be found in these argumentative discourses give way to a series of linguistic games, in actual Wittgenstein's sense, wherein the different contexts necessarily give the word unclear, discordant, and sometimes completely opposite meanings²². The points of view previously outlined, in other words, generate plural narrations, marked by different premises, ends and results, and endowed with differing degrees of prescriptive compulsoriness, generally dependent upon the *auctoritas* of the champion of such peculiar standpoint. If we then acknowledge the fact that, within this scope of research, we cannot identify founding axiological traits, whose truth can constitute a solid argumentative assumption, we are only left with pathways which may be coherent, but which are basically made up of opinions, more or less authoritatively upheld.

21 R. DAVID LANKES, *The Atlas of New Librarianship*, Cambridge (Mass.), MIT, 2011.

22 LUDWIG WITTGENSTEIN, *Philosophical Investigations*, Oxford, Basil Blackwell, 1953.

3. *Cultures of evaluation*

Many years ago, Alfredo Serrai had already admonished with great clarity that «Valutare il funzionamento di una biblioteca è impresa che molti giudicano irrealizzabile per tre ordini di motivi: la prima per la diversità non comparabile dei criteri di valutazione, la seconda per la molteplicità non cumulabile dei processi che hanno luogo in biblioteca, la terza per la convinzione che il mondo bibliotecario rientri nella sfera politica e sia pertanto insondabile da strumenti di analisi che non tengano primariamente conto di questa appartenenza» [“Assessing how the library works is an endeavour many deem impossible because of three kinds of reasons: first, for the incomparable difference in evaluation criteria; second, for the non concurrent variety of the processes taking place in a library; third, for the conviction that the library world falls within the political sphere and therefore cannot be explored by analysis tools unless taking primarily into account this association”]²³. Indeed, assessing a library according to current praxes (and in particular for the quantitative ones) consists in forming a judgement that measures the correspondence degree of some phenomena, situated in the library space, to the ones present in the ideal space of a reference model, basically accounting for their degree of adequacy or variation²⁴. In Serrai’s words, analysing the library purposes from the quantitative point of view means namely examining «l’esercizio della relazione di utenza nei confronti di una raccolta di documenti» [“the exercise of user relationship with regard to a document collection”]²⁵.

23 A. SERRAI, *Guida alla biblioteconomia*, Firenze, Sansoni, 1981, p. 118.

24 ‘Quality’, according the definition of ISO 9000 standard, is indeed defined as «the consistent conformance of a product or service to a given set of standards or expectations»: cf. ISO 9000, *Quality Management Systems, Fundamentals and Vocabulary*, Geneva, International Organization for Standardization, 2005.

25 Ivi, p. 119. The bibliography in this book curated by Maria Senatore is devoted to the literature on this subject. For a historical introduction to these topics in the reflection developed in Italy it suffices here to recall that it was initiated in the former half of the 1990s by GIOVANNI SOLIMINE (cf. *Problemi di misurazione e valutazione dell’attività bibliotecaria*, in: *Il linguaggio della biblioteca. Scritti in onore di Diego Maltese* raccolti da Mauro Guerrini, 2 voll., Firenze, Giunta regionale toscana, 1994 (2nd ed.: Milano, Editrice Bibliografica, 1996); *Per una prassi biblioteconomica ispirata ai principi del management*, in: *Biblioteche e servizi: misurazione e valutazione. Atti del XI Congresso nazionale dell’Associazione italiana biblioteche*, Roma, 26-28 ottobre 1994, Roma, Associazione italiana biblioteche, 1995; *Quanto valgono le valutazioni. Il punto sulle esperienze di rilevazione statistica dei servizi delle biblioteche italiane*, «Biblioteche oggi», 14, 1996, 4, p. 34-39), which were followed by the studies by ANNA GALLUZZI (*La valutazione delle biblioteche pubbliche. Dati e metodologie delle indagini in Italia*, Firenze, Olschki, 1999; *Modelli e strumenti per la valutazione dell’efficacia in Gestire il cambiamento. Nuove metodologie per il management della biblioteca*, a cura di G. Solimine, Milano, Editrice Bibliografica, 2003, p. 289-385; *La valutazione dei servizi*, in: *Biblioteconomia: principi e questioni*, a cura di G. Solimine e Paul Gabriele Weston, Roma, Carocci, 2007, p. 129-143), by GIOVANNI DI

On the other hand, qualitative methodologies are more vague and belong to interpretative fields outside this «user relationship», as they were recently illustrated and discussed by Chiara Faggiolani²⁶, relating evaluation to the very intricate problems regarding the fickle identity of contemporary public libraries, especially to what their 'impact' is²⁷, and to how they are perceived²⁸. Anna Galluzzi and Chiara Faggiolani, in a recent previously mentioned study where the paramount importance of interdisciplinary extensions is evoked, effectively try to update the state of the art on these subjects, also sketching a general periodisation of the different types of evaluation tools. In that way, a line emerges where the attention focused during the 1980s on «dati di struttura» [“structure data”] (facility, spaces, collections, types of tools etc.) and on «dati di attività» [“activity data”] (criteria of collection resources selection, impact indexes, loan, circulation etc.), while studies in the 1990s discovered the relevance of user satisfaction for the services used. In the last years, finally, the social and economical impact of libraries has been one of the key points of reflection, in its anthropo-

DOMENICO (*Biblioteconomia e culture organizzative. La gestione responsabile della biblioteca*, Milano, Editrice Bibliografica, 2009, with special reference to chapters 2 and 4; *Valutare l'impatto delle biblioteche accademiche: le ragioni di un progetto valutativo e di un seminario*, in: *L'impatto delle biblioteche accademiche. Un progetto e un seminario*, a cura di G. Di Domenico, Roma, AIB, 2014, p. 9-35; *Sistemi e modelli per la gestione della qualità in biblioteca*, in: *Biblioteche e biblioteconomia. Principi e questioni*, a cura di G. Solimine e P. G. Weston, Roma, Carocci, 2015, p. 153-173), by CHIARA FAGGIOLANI (*La ricerca qualitativa per le biblioteche. Verso la biblioteconomia sociale*, Milano, Editrice Bibliografica, 2012). We finally refer to FAGGIOLANI and GALLUZZI, *La valutazione della biblioteca*, in: *Biblioteche e biblioteconomia*, p. 175-204. Non-Italian bibliography, Anglo-Saxon for the most part, is very large, and generally linked, in its early configuration, to RICHARD H. ORR, *Measuring the Goodness of Library Services: a General Framework for Considering Quantitative Measures*, «Journal of Documentation», 29, 1973, 3, p. 315-331. Ample collections of resources on this topic (*Useful Links to Libraries Evaluation*) are available on IFLA and ALA websites (<<http://www.ifla.org/statistics-and-evaluation/links-library-evaluation>> and <<http://www.ala.org/pla/performance/measurements>>).

26 C. FAGGIOLANI, *Studio dell'efficacia dell'approccio qualitativo all'analisi dell'utenza reale e potenziale dei servizi bibliotecari attraverso la ricerca empirica* in: *1. seminario nazionale di biblioteconomia*, p. 183-186.

27 Cf. ISO 16439, *Methods and Procedures for Assessing the Impact of Libraries*, Geneva, International Organization for Standardization, 2014, commented by G. DI DOMENICO in *ISO 16439: un nuovo standard per valutare l'impatto delle biblioteche*, «AIB studi», 54, 2014, 2/3, p. 325-329. DOI: 10.2426/aibstudi-10279. For an overview on the use of ISO standards see, by ROSWITHA POLL, *I dati che abbiamo e i dati che potremmo avere: nuovi sviluppi nel campo della valutazione delle biblioteche*, «Bollettino AIB», 51, 2011, 4, p. 369-380 and the extensive bibliography on *Impact and Outcome of Libraries*, <http://www.ifla.org/files/assets/statistics-and-evaluation/publications/Bibliography_Impact_and_Outcome_11_2012.pdf>.

28 In this sense, therefore, «the key issue is that quality becomes a meaningful concept only when it is indissolubly linked to the aim of total customer satisfaction»: cf. ISO 9000, *Quality Management Systems*.

logical and psychological developments²⁹. The direction taken by the methodological evolution, therefore, clearly shows a tension of evaluation cultures, as a whole, towards a perspective able to account for not only arguments supporting service management, but more in general to shed some light on the ways in which a library interprets and organises its own identity, as we have seen comprising phenomena related to documents and information, already unclear and elusive on their own, in anthropological fields which are even more difficult to explain. Finally, we ought to point out that, within this evolution lines, also the traditional evaluation perspectives promoted and validated by IFLA try to take into account the changing aspects that need to be evaluated. Previously recalled *Measuring Quality: Performance Measurement in Libraries*, edited by Roswitha Poll & Peter te Boekhorst, underlines that the 40 indicators selected must be able to organise information regarding «The demand for cost-effectiveness»; «The library as working place and meeting point»; «The library's teaching role»; «The library's functions for external users»; «The importance of staff» (*Preface*, p. 7-8).

In the light of these considerations, therefore, the research hypotheses Scott Nicholson had some years ago presented, in an article titled *A Conceptual Framework for the Holistic Measurement and Cumulative Evaluation of Library Services*, take on a special relevance, albeit with no further attempts of application (Fig. 3). Nicholson, after introducing and discussing the theoretical and methodological tenets of evaluation, in a framework mainly aimed at service management, acknowledges the fact that «many evaluations occur because of a problem or report requiring immediate management involvement. These last-minute evaluations are akin to modern emergency-room medicine: just as many patients wait until the symptoms become unbearable before seeking treatment, many library decision-makers wait until problems force a rapid evaluation. Just as the goal of holistic medicine is reaching a state of wellness for the entire body, the goal of holistic evaluation is reaching a state of wellness for the entire library. While the subsystems of a human body are more closely entwined than the subsystems of a library, enough connections exist between the library subsystems to give this comparison validity»³⁰.

29 A. GALLUZZI - C. FAGGIOLANI, *L'identità percepita delle biblioteche*.

30 In «Journal of Documentation», 60, 2004, 2, p. 164 - 182: 164.

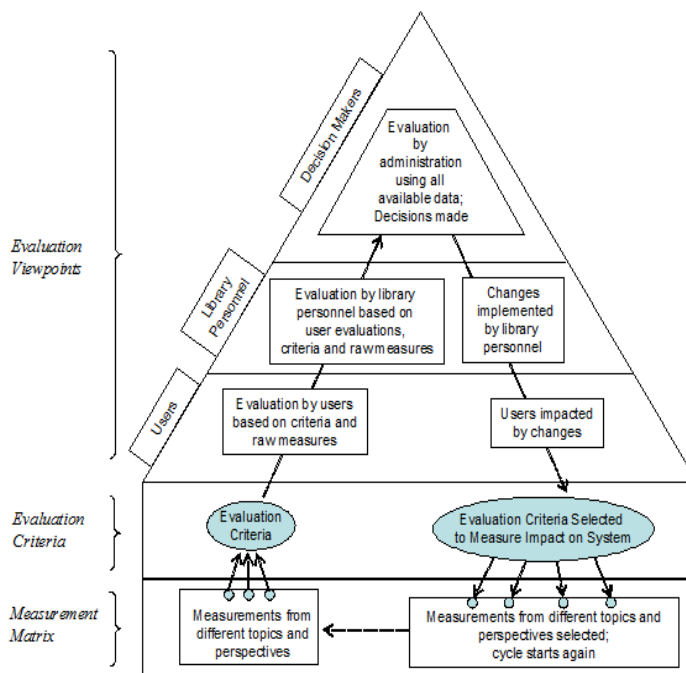


Fig. 3 - Holistic measurement and evaluation cycle.

Source: S. NICHOLSON, *A Conceptual Framework for the Holistic Measurement and Cumulative Evaluation of Library Services*,

<<http://www.bibliomining.com/nicholson/holisticfinal.html>>.

The founding lines of the reflection developed in the library science, therefore, clearly show the demand for analysis tools allowing for the multiple elements we need to consider to draw a profile of contemporary public libraries. At any rate, at this point of our reflection, I believe we are faced with an aporia not easy to solve, which basically consists in the ever-increasing degree of complexity principles and methods of evaluation must deal with. To some respects, it is as if the unclear object of evaluation (the public library), its not easily discernible boundaries, were emphasising the structural limits of goal-oriented, empirical and practical methods. If the hypotheses at the root of this study do not consist in elaborate data collection that we can direct towards management, but in the attempt to understand, discuss, interpret ongoing changes, we may perhaps appreciate the benefits of giving centre stage to what really happens in a library, focusing our attention on the different kinds of phenomena, which in certain circumstances can be observed and meas-

ured. In order to follow this guideline, we then need to carry out an uncommon series of epistemological operations, which will be discussed in the next paragraph.

4. *Starting from the phenomena, connecting the data*

At this point the reader is presumed to be aware of the reasons bringing to reconsider the need for a radical return to the phenomena, in their concrete uniqueness. But this operation alone is clearly not enough. The different phenomena which can be identified in the library space, in this way, risk being seen and conceived as unrelated pieces of a jigsaw puzzle that we do not know how to compose. From these assumptions, in this paragraph we intend to verify the results of radically holding one's judgement on the purposes, tasks, duties of the public library, and experiment on the field the possibilities of adopting an *epochè* like the one Edmund Husserl (1859-1938) introduced in the late 19th century in a very different context. In this phase marked by such radical discontinuities, it is necessary to succeed in envisaging research paths that first of all tackle with coherent methods, tools, heuristics, the first and basic phenomenological matter, i.e. explaining what happens in the physical and conceptual boundaries of the public library space. Of course, holding one's judgement does not imply that one rudimentarily dismisses the historical and actual dimension of the contemporary public library; all the points of view, no matter how elaborated, naturally maintain their original argumentative soundness, within the limits previously mentioned. It is necessary, and perhaps essential, that research principles and methods shift, so as to adjust directly to the examination field, hence the considerations here specifically suggested: i.e. analyse the factors of change in their initial expressive configuration, in their being first of all phenomena we come across and necessarily have to come to terms with, metaphorically speaking. Therefore, turning to the phenomena means to once more – after the famous Husserlian *epochè* – consciously hold one's critical judgement, relinquishing the reassuring perspective that regulates, defines and binds it to a predetermined and authoritative interpretative framework. Let us try and carefully read an ample excerpt from a book by Husserl, wherein he defines and delimits the domain of *epochè*: «But our purpose is to discover a new scientific domain, one that is to be gained *by the method of parenthesizing* which, therefore, must be a definitely restricted one. The restriction can be designated in a word. *We put out of action the general positing which belongs to the essence of the natural attitude*; we parenthesize everything which that positing encompasses with respect to being; *thus the whole natural world* which is continually “there for us”, “on hand”, and which will always remain there according to consciousness as an “actuality”

even if we choose to parenthesize it. If I do that, as I can with complete freedom, then I am *not negating* this “world” as though I were a sophist; I am *not doubting its factual being* as though I were a sceptic; rather I am exercising the “phenomenological” *epochè* [...] I inhibit precisely the being-accepted beforehand of “this” world or its antecedent being-for-me which, as a being posited both actually and habitually, carries me continuously in my entire natural living and is this the foundation of all my practical and theoretical living; I take from it the force that, up to now, gave me the world of experience as my basis. And yet the old course of my experience goes on as it always has, except that this experience, modified by the new attitude, no longer supplies the “basis” on which I was standing up to now. In this manner I exercise the phenomenological *epochè* [...] *Thus I exclude all sciences relating to this natural world* no matter how firmly they stand there for me, no matter how much I admire them, no matter how little I think of making even the least objection to them; I make *absolutely no use of the things posited in them*»³¹. As is known (and how it can be inferred by reading the long quotation) Husserl’s standpoint does not correspond at all to that of ancient scepticism; it only expresses the inescapable need to try and identify the conditions of an argumentative ground no longer limited by coalescent layers of interpretations, interpretations of interpretations, and so forth to infinity. Does it make sense to try and apply such a complex methodology to the measured field of contemporary public libraries? Of course, the writer thinks so, i.e. that it does make sense, and especially that we must attempt to discuss the issues of contemporary library science from an analysis as free and open as possible of the phenomena that outline, constitute, people this research field. In order to develop this reasoning, do we have to move outside a certain librarian tradition? Sure, without a doubt, but we must also ask ourselves even in the light of ordinary common sense: is this *really* an issue? As far as I am concerned, I reckon it would be promising to start a research where initially *all* the phenomena come to light and manifest themselves as their being in essence ‘data’; this implies the assumption of a deliberately passive listening, possibly and a hopefully neutral and objectifying, condition. To do so we must go straight to the field, equipped with what our methodological traditions and judgement skills allow us, carefully assessing if new methods and tools might be beneficial to the pursuit of these goals. I believe the suggestions and risks from adopting such an interpretative perspective are blatant. The advantages basically consist in releasing the analysis of the phenomena from

31 EDMUND HUSSERL, *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy*, translated by F. Kersten, Den Haag - Boston - Lancaster, Nijhoff, 1983, p. 60-61. (*Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie*, 1913). Italics in original.

all practical finalisation, which would necessarily falsify its evaluation. The risks have to do with the fact that, like in the most radical deconstructionist perspectives, we may have to face an even more confused and partial bulk of data, stripped of their contexts and consequently impossible to know, literally. The main difficulty consists in focusing the attention on all recognisable relations between data. And that is when physicist and network science specialist Albert-László Barabási comes into play³², here referred to as a witness of a study perspective based on the famous formal model elaborated by Swiss mathematician and physicist Leonhard Euler (1707-1783), in order to solve the problem of Königsberg's seven bridges, which consisted in analysing the chances to walk across all seven bridges following only one direction, crossing each bridge only once and so without ever going back. Euler, as is known, solved the problem by showing that this hypothesis could not be viable, and came to this result using an abstract model, in other words free from Königsberg's specific geographical local configuration, and therefore using the principles of what is now called graph theory. Euler basically examined, in his model, four urban areas enclosed in the distribution of bridges, and he represented them with a point (to-day called 'node'); while the bridges were visualised with a line segment ('arch'). We herewith propose (Fig. 4) the sequence of the formalisation levels we used.



Fig. 4 - Progressive elaboration of the Königsberg's Bridges Problem. GFDL Licence via Wikipedia, <http://it.wikipedia.org/wiki/File:Grafo_ABCD.jpg#/media/File:Grafo_ABCD.jpg>.

Discussing at length the foundations of this theoretical area certainly exceeds the writer's competence; for this reason, aside the complexity of the theoretical model as a whole, we shall merely delve into some particularly significant notions of the conceptual structure of network science (and of Barabási's work), like the ones saying that «Each one of us is part of a large cluster, the worldwide social net, from which no one

³² General information on his research activity are available at the URL <<http://www.barabasi.com/>>.

is left out. We do not know everybody on this globe, but it is guaranteed that there is a path between any two of us in this web of people. Likewise, there is a path between any two neurons in our brain, between any two companies in the world, between any two chemicals in our body»³³. If this is true (or if it is reasonable to think it may be true), we may envisage an analysis path, which would attempt a comprehensive interpretation of the phenomena on a fine-grained level and of the relations which can be established between them. Barabási has tried to develop the principles of network science on the field in the book *Bursts*, where, once we have acknowledged our «nakedness in the face of increasingly penetrating digital technologies», and in fact from this acknowledgement, we may realise the conditions to create «an immense research laboratory that, in size, complexity, and detail, surpasses everything that science had encountered before». He is profoundly convinced that, if we succeed in following the «trail», we may identify the «evidence of a deeper order in human behavior, one that can be explored, predicted, and no doubt exploited». Moving along this direction implies the preliminary assumption to «stop viewing our actions as discrete, random, isolated events», since they, on the contrary, «seem to be part of a magic web of dependencies, a story within a web of stories, displaying order where we suspected none and randomness where we least expect it»³⁴. If we see things from this perspective, 'phenomena' therefore basically become 'data' we must analyse, associate, interpret: is someone perhaps thinking we are jumping out of the frying pan into the fire? Leaving metaphors aside, data analysis undoubtedly is for many reasons complex and nonetheless interesting and promising. It aims at «inspecting, cleaning, transforming, and modeling data with the goal of discovering useful information, suggesting conclusions, and supporting decision making», hence positing probabilistic and statistical inferences, like for instance a cause-effect relation between two phenomena, or formulating a prediction or anticipation of a given fact³⁵. The remarkable quantity of data to examine leads us to the field of complex systems, and we may final-

33 ALBERT-LÁSZLÓ BARABÁSI, *Linked. The New Science of Networks*, Cambridge MA, Perseus, 2002, p. 18.

34 A.-L. BARABÁSI, *Bursts. The Hidden Pattern Behind Everything We Do*, New York, Dutton, 2010, p. 11.

35 LORENZO VERNA, in the paragraph *Complexity of the concept of 'data'*, in: MARCO RUBICHI - M. PAGANO - L. VERNA, *Libraries, Archives, Museums Between Physical and Digital Space. Models and Analysis Perspectives*, p. 9, <https://satelliteturin2014.files.wordpress.com/2014/05/ifaltrsatlite2014_rubichi-et-al.pdf>. On principles and methodologies of data analysis there certainly is an extensive literature, and we refer to: MELISSA A. HARDY - ALAN BRYMAN, *Handbook of Data Analysis*, London; Thousand Oak (CA), SAGE Publications, 2004; PIERGIORGIO CORBETTA, *La ricerca sociale: metodologie e tecniche. IV. L'analisi dei dati*, Bologna, Il Mulino, 2003; PAOLO GIUDICI, *Data mining. Metodi informatici, statistici e applicazioni*, 2nd ed., Milano, McGraw Hill, 2005.

ly surmise that «since all complex systems have many interconnected components, the heart of this discipline is network science»³⁶. A network, or graph, is the result of two basic components: the nodes, i.e. the entities present in the network, and the arches, i.e. the relations between nodes, according to the ways described in a famous article by mathematicians Paul Erdős (1913-1996) and Alfréd Rényi (1921-1970), *On Random Graphs*³⁷, which proposed the theory of random distribution of nodes and arches in graphs (Fig. 5). The phenomenon of so-called six degrees of separation is related to the concept of graph, in other words each object in any network is linked to every other object in the same network by an average of five relationships³⁸.

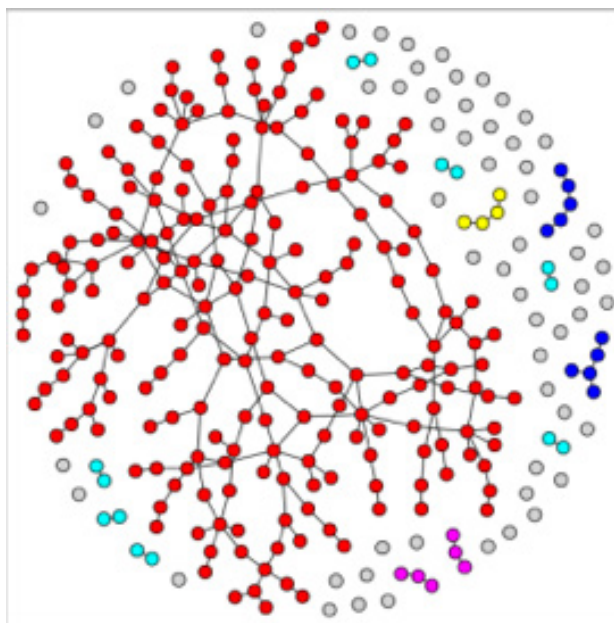


Fig. 5 - Random graph according to Erdős and Rényi model.

Source: <<https://linbaba.files.wordpress.com/2010/10/erdos-renyi.png>>.

Data analysis in the light of network science, therefore, could then be useful to help explain what relations exist between the phenomena, for their being 'data', which take place in the complex system of a library. More specifically, as we shall see, it could be applied to the analysis of different types of digital data connected to the library's

³⁶ Ibidem.

³⁷ In «Publicationes Mathematicae», 6, 1959, p. 290-297, <http://ftp.math-inst.hu/~p_erdos/1959-11.pdf>.

³⁸ The matter is discussed at length in A.-L. BARABÁSI, *Linked. The New Science of Networks*, p. 25 and ff.

identity and purposes; no doubt important data as traces, which are difficult not only to evaluate, but also to simply collect, because they are very numerous. Each digital datum, indeed, is the result and trace of an action, be it a research on a catalogue or a like added to a Facebook post; for this reason, it would surely be very interesting to try and see, also through proper visualisation techniques, how data-phenomena relate to one another and how they make the system work in its entirety.

We better specify that the principles here briefly referred to are only one of the working hypotheses currently considered, and only when data are collected and examined, analysis models will be evaluated, incidentally strictly in connection with visualisation ones. The impression is that the graph theory may turn out to be useful to analyse complex data with no overt relationships; however, all the data we must consider make adopting one single formal model of representation rather difficult. Therefore, with this frame of mind, we may start discussing the nature of the connection elements which typify our field of study, and which in this stage we perhaps better cautiously lead back simply to the general area of complexity. Moreover, we may consider in the background the reflections of such scholars as philosopher and physicist Henri Poincaré (1854-1912), the father of modern chaos theory, physician and philosopher Aleksandr Bogdanov (1873-1928), who tried to elaborate a general science of all living and non-living systems, he called 'tectology', biologist Ludwig von Bertalanffy (1901-1972), father of the general theory of systems, meteorologist Edward Lorenz (1917-2008), who discovered the so-called 'butterfly effect' (Fig. 6), biologist Ilya Prigogine (1917-2003), Nobel prize winner in 1977 for her research on complex systems far from equilibrium, besides many studies by previously mentioned Edgar Morin.

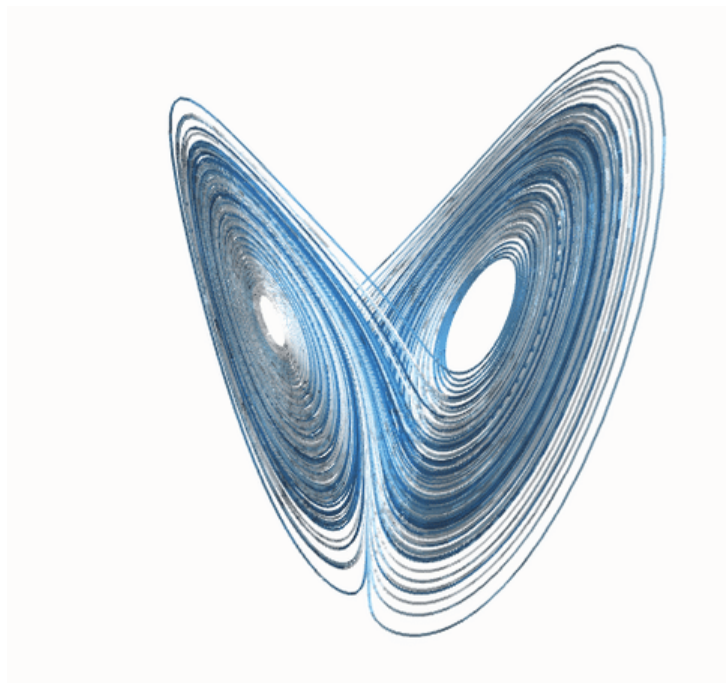


Fig. 6 - Butterfly effect: evolution of two trajectories in space when the initial condition varies.

Source: <<https://www.quara.com>>.

This complexity is the same one psychologist, anthropologist and sociologist Gregory Bateson (1904-1980) defined «dance of relationships», which «connects» every living thing. More in general, all of the work by this outstanding thinker may be read as a huge attempt to «rendere visibili le relazioni» [“make relationships visible”], and especially those regarding relationships between people, which become meaningful only if they are placed within the relational contexts they belong to³⁹. This perspective may allow us to appreciate the ecological dynamism of all complex systems, and by extension also of the library; an interconnected, evolutionary and self-regulating environment of elements continuously interacting with one another, linked by relationships which can be made visible; relationships which produce micro-systems, connected to other micro-systems, and so forth, to infinity, in a network where the effects of what Bateson defined «algorithms of language» (i.e. reason) are weaved together with the more ancient and primal «algorithms of the heart», which express them-

³⁹ Cf. SERGIO MANGHI, *La conoscenza ecologica. Attualità di Gregory Bateson*, Milano, Raffaello Cortina, 2004, p. 53 and ff. and p. 63.

selves through dreams, poetry, religious experience⁴⁰. The 'mind', in Bateson's words, is the «structure connecting» all the different kinds of phenomena, and by using this tool correctly we can account for the relationships connecting the single 'things' to one another⁴¹. The reality we have learnt to come to terms with, therefore, is not much different from the eccentric game of croquet Alice plays in wonderland with the flamingo, in a cloddy place, where the balls to hit are porcupines, the arches are soldiers, the bat is a flamingo; all this while the Queen issues contradictory and hysterical orders. Let us read the description Lewis Carroll gives first-hand:

The chief difficulty Alice found at first was in managing her flamingo: she succeeded in getting its body tucked away, comfortably enough, under her arm, with its legs hanging down, but generally, just as she had got its neck nicely straightened out, and was going to give the hedgehog a blow with its head, it *WOULD* twist itself round and look up in her face, with such a puzzled expression that she could not help bursting out laughing: and when she had got its head down, and was going to begin again, it was very provoking to find that the hedgehog had unrolled itself, and was in the act of crawling away: besides all this, there was generally a ridge or furrow in the way wherever she wanted to send the hedgehog to, and, as the doubled-up soldiers were always getting up and walking off to other parts of the ground, Alice soon came to the conclusion that it was a very difficult game indeed⁴².

Knowing, in this sense, implies the chance to successfully observe and interpret reality, and hence the library too, according to a wider, more open-minded, creative perspective; and, especially, trying to see phenomena and relationships between them, not in light of rigid and deterministic causal sequences, but as the result of the relationships connecting the «dancers» who move in the system space.

These arguments, closely intertwined, can be summed up in an underlying need, I do not know how perceptively recognised on a scientific and professional level, in other words, in the need to have an interpretative outlook on the library phenomena, which seeks for re-

40 G. BATESON, *Steps to an Ecology of Mind*, San Francisco, Chandler Pub. Co., 1972, p. 148.

41 Cf. G. BATESON, *Mind and Nature. A Necessary Unit*, New York, Bantam Books, 1980. In Bateson's words the concept allowing to conceive this connection is the counterintuitive one of 'Mind', meant as «un insieme interconnesso, evolutivo e autocorrettivo di parti interagenti» [“an interconnected, evolutionary and self-correcting set of interacting parts”] S. MANGHI, *La conoscenza ecologica*, p. 57. Hence, 'Mind', in this sense, is a meta-language able to represent and describe complexity.

42 LEWIS CARROLL, *Alice's Adventures in Wonderland*, <<https://www.cs.indiana.edu/metastuff/wonder/ch8.html>>.

relationships between them traced according to a perspective we may define as essentially a holistic one.

5. *On the field*

In this paragraph I shall briefly outline the research project which is the “laboratory” where, based on the theoretical premises previously exposed, we shall attempt to examine what happens in the (physical, digital, metaphorical) space of three Tuscan libraries (Oblate in Florence, Ginestra. Fabbrica della conoscenza in Montevarchi, MMAB Museo Archivio Biblioteca in Montelupo Fiorentino), and whose early results are described in Maria Pagano’s paper in this volume, and whose processing will be completed with the end of 2015. By the expression ‘library space’, within this scope, we refer to all the bibliographical and extra-bibliographical phenomena which can be placed in the physical, organisational, metaphorical, digital boundaries of the library⁴³. To this respect, library space is, as a whole, analysed as a system of signs and codes aimed at producing procedures of cultural meaning, a sort of text, in a socio-semiotic sense, including user’s practices⁴⁴. The phenomena shall be identified and described in the physical and metaphorical confines of these institutions; at the same time, from an evaluative and interpretative point of view, we shall try to provide complete and as cohesive as possible representations of such phenomena. That way, as is evident, we shall apply two different languages to the same phenomena, the former a descriptive, the latter an interpretative one. Hence, the institutions examined in this first stage, begun in the latter half of 2014, were Biblioteca delle Oblate in Florence (<http://www.biblioteche.comune.fi.it/biblioteca_delle_oblate/>), Ginestra Fabbrica della conoscenza in Montevarchi (<<http://www.fabbricaginestra.it/>>), MMAB. Museo Archivio Biblioteca in Montelupo Fiorentino (<<http://www.comune.montelupo-fiorentino.fi.it/index.php/cosa-e-il-mmab>>).

The methodological premise of the project, as already said, consists in not relating description, and its ensuing evaluative outcome, to the conscious or unconscious restrictions posed by adhering to a pre-de-

43 The underlying principles and methods which can be used to operate within this perspective have been recently exposed in the afore-mentioned *Lo spazio della biblioteca*. The book, and especially the chapter *Le persone*, analyses, argues and discusses the analysis methodologies falling within an interpretative framework which can be linked to socio-semiotics, on the one hand, and to examination perspectives based on ethnographic observations, on the other, taking into consideration also the analysis methods of museum space from the field of visitor studies.

44 For a more extensive discourse on these matters I refer to chap. 4 in my *Un’idea di biblioteca* (Manziana, Vecchiarelli, 2010, p. 157 and ff.).

finned model; this premise rests on two founding elements. The former consists in a sort of pursued and conscious syncretism: in that sense, we shall use all the different evaluative tools we can recover. This helps to both collect data and information on the phenomena, and evaluate the reference meta-theoretical profiles; in other words, elaborate a first-level (of the phenomena), and a second-level evaluation (of how the phenomena are assessed). The latter element is expressed by the attempt to use analysis models of all the data collected borrowing principles from the field of network science. The observation preliminarily and basically extended to all the phenomena is pivotal, because only this way – it is useful to stress once more – we may rule out the restrictions, both conscious and unconscious ones, that adhering to a model implies. In order to better convey this concept, the gathering of data and quantitative indicators regarding loan, impact, circulation, growth of collections is clearly related to a model intended to evaluate the ways in which specific services are provided; equally clear is the fact that quantitative methods cannot (and will not) account for many other phenomena (essentially actions) occurring in the library's physical space. On the opposite end, with qualitative methods (questionnaires, interviews, focus groups, etc.) the general goal is to understand the ways in which a library, in its conceptual and organisational overall configuration, is perceived and interpreted by its social groups (actual and potential users, stakeholders, staff etc.). From the practical point of view, we have therefore proceeded to pay a preliminary visit to each institution, in order to gather all the data and information necessary to the next stage of the fieldwork: namely all the elements necessary to understand the building structure and functions (plans, photographic documentation, architectural and librarian projects), the qualitative and quantitative examination tools used in the facilities analysed⁴⁵, the sources accounting for any debate arisen when defining the project. At the same time, we have carried out an accurate analysis of the architectural, organisational and functional configuration of space, so as to identify what actions are and are not allowed. We have selected parts of library space of special interest, wherein for example complex phenomena take place, about which we intend to gather more coherently formed knowledge. Then, from these phenomena typified in actions we have defined some observation grids, used by whom is conducting the survey. The observer places himself/herself in the space analysed and traces, noting them down, the different uses in a sample period,

45 The monitoring of the services trend in Tuscan public libraries is under the aegis of Regione Toscana. The last report available, from the period 2011-2013, titled *Il valore delle biblioteche pubbliche e della cooperazione bibliotecaria toscana* <<http://www.regione.toscana.it/cittadini/cultura/biblioteche>>.

whose duration can be estimated to around 6 days⁴⁶. Furthermore, also a non-structured observation of the space, called 'logbook', has been carried out. Finally, a Likert scale questionnaire was drawn up, allowing us to evaluate the behaviour of the person interviewed insofar as the content of each item, modulating the degree of one's agreement or disagreement, expressed in five options (Extremely/ Very/ Average/ Poor/ Not at All). The questionnaire is divided into four sections. The first (24 questions) is aimed at analysing the evaluation of what aspects users believe to be more significant to ensure the quality of library services (e.g.: quality of the architectural space, of the catalogue, seminars activated, educational activities etc.). The second section (9 questions) is about the perception of the aspects believed to be the most relevant to evaluate the librarian's professional skills (cataloguing competences, relative to information literacy, relational inclinations etc.). The third section (9 questions) is about space perception (pleasant, noisy, etc.). The fourth section is made of six questions identifying different spaces in the analysed facility, and ask the compilers to indicate which one they prefer. The questionnaires (as Maria Pagano's paper in this volume clarifies), were submitted to staff members and random samples of users present at the time when these observations were carried out⁴⁷. From the point of view of digital contents, different types of data on the informative content of catalogue records will be gathered and analysed, together with digital objects connected to the records, such as text, audio, video file, etc.; logs of user's researches on web portals and online catalogue; evaluative elements used (folksonomic tags, likes, shares and posts on Facebook and other social media); relations connected to all these digital traces present online. The goal, in this specific research, is to attempt to combine the analysis of data coming from so-called log analysis - measuring the interactions between users and systems of information representation and recovery - with the information which be retrieved by analysing data produced in the environment of the different types of social web⁴⁸. In other words, considering

46 According to this perspective further examination was carried out in some dissertations defended in the past years at the University of Turin, and which focused on the analysis of the space in Biblioteca Universitaria and in Biblioteca civica "Primo Levi" in Turin, in Biblioteca Archimede in Settimo Torinese, in Biblioteca civica in Alessandria. For a methodological overview on the observation techniques cf. A. GONZÁLEZ-TERUEL - M. BARRIOS CERREJÓN, *Métodos y técnicas para la investigación del comportamiento informacional*, p. 159 and ff. (chapter 6, *Observación*).

47 Ivi, p. 79 and ff. (chapter 3, *Los estudios de encuesta*).

48 Ivi, p. 227 and ff. (chapter 9, *Análisis de los registros de transacciones*). On social web analysis, within a now ever-expanding literature, cf. EVELIEN OTTE - RONALD ROUSSEAU, *Social Network Analysis: a Powerful Strategy, Also for the Information Sciences*, «Journal of information science», 28, 2002, 6, p. 441-453. DOI:

how this project strategy is articulated, we need to start examining the relationships between so-called 'big data' and libraries, and the three V's characterising them: volume, velocity, variety⁴⁹.

With the two following pictures (8 and 9) we present a simple and for some respects rudimentary visualisation model of data relations that we shall here only exemplify⁵⁰. Fig. 8 identifies 4 digital environments in which there are, in different informative contexts, some linguistic occurrences, which in the example correspond to names of contemporary Italian literature authors. Data, therefore, have a different value according to the different contexts: in the case of the catalogue, 'Andrea Camilleri' is the key used for a simple research or also, in the case of the 'social' catalogue, i.e. full of folksonomies, a term users employ; in the case of Facebook and Twitter accounts of the library, the same occurrence we can imagine in the posts relative to a meeting with the author. On the website the same linguistic occurrence can be present in texts about that author, or where the meeting is disclosed and promoted, and so forth. Usually, the correlations of these data are not analysed, though we may clearly infer there are some. In that sense, trying to examine all the effects produced by these occurrences in the library's different space and services might prove interesting. 'Andrea Camilleri', therefore, could be useful to determine the number of books by this author on loan, according to traditional or digital ways; the number of posts, likes and tweets about the event planned and carried out; the number of pictures of the event uploaded on Instagram. In other words, by keeping all the information that can be obtained from these data together, we would succeed in mapping the impact of the various actions related to the 'Andrea Camilleri' occurrence in the different environments and services connected to the specific configuration of library space, for how in this paper this expression is meant. 'Library', in that sense, is a term whose value changes according to the different (physical and

10.1177/016555150202800601; BING LIU, *Web Data Mining. Exploring Hyperlinks, Contents, and Usage Data*, 2nd ed., Berlin, Springer, 2011; *The SAGE Handbook of Social Network Analysis*, edited by John Scott and Peter J. Carrington, London; Thousand Oak (CA), SAGE Publications, 2011.

49 A synthetic introduction, with bibliographical reference, can be found in MARK BIERAUGEL, *Keeping Up with... Big Data*, <http://www.ala.org/acrl/publications/keeping_up_with/big_data>. For a wider overview cf. *Big Data: the Next Frontier for Innovation, Competition, and Productivity*, [Texts by] James Manyika [et al.], Washington, McKinsey Global Institute, 2011, and JANNA ANDERSON - LEE RAINIE, *The Future of Big Data*, <<http://www.pewinternet.org/2012/07/20/the-future-of-big-data/>>, report from Pew Research Center's Internet & American Life Project, <<http://www.pewinternet.org/>>.

50 An effective outline of data visualisation models and examples is offered by *Data Flow. Visualizing Information in Graphic Design*, ed. by Robert Klanten, Nicolas Bouquin, Thibaud Tissot, Sven Ehmann, Berlin, Gestalten, 2008.

digital) environments, which suffer the consequences of the actions, variously contextualised, associated to the linguistic occurrence. If we picture the 'library' as a circle, on the inner surface we may then highlight the quantified effects of these actions, evaluate them both in their endogenous dimension and compare them to the ones recognised using other occurrences (Fig. 9).

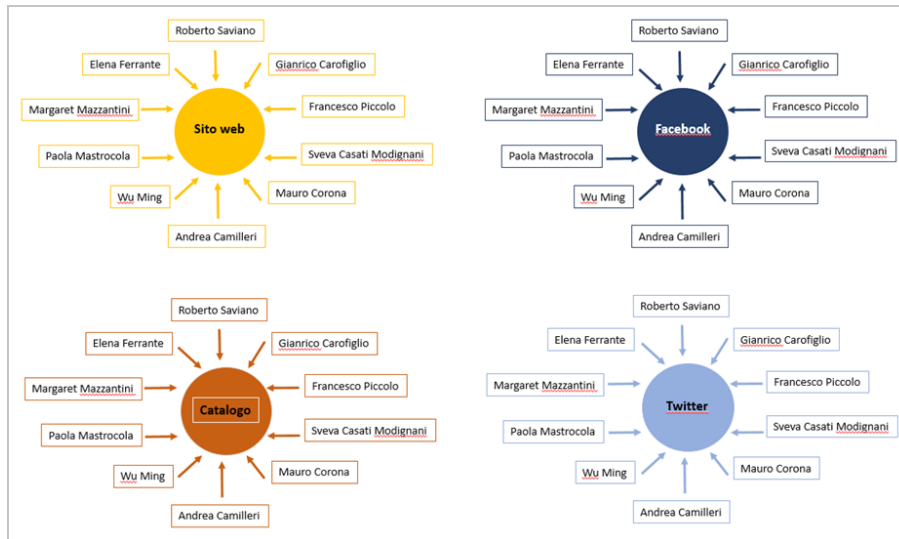


Fig. 8 - Types of data in different digital environments such as catalogues or websites.

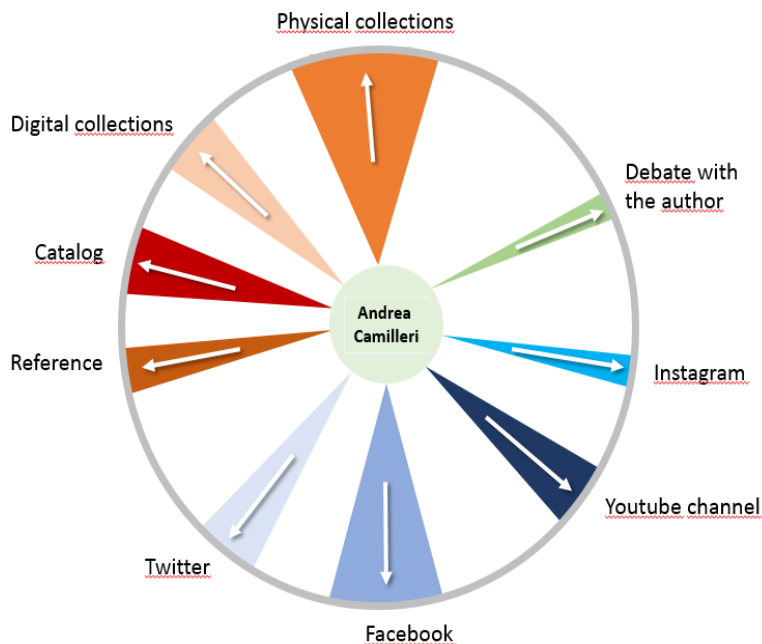
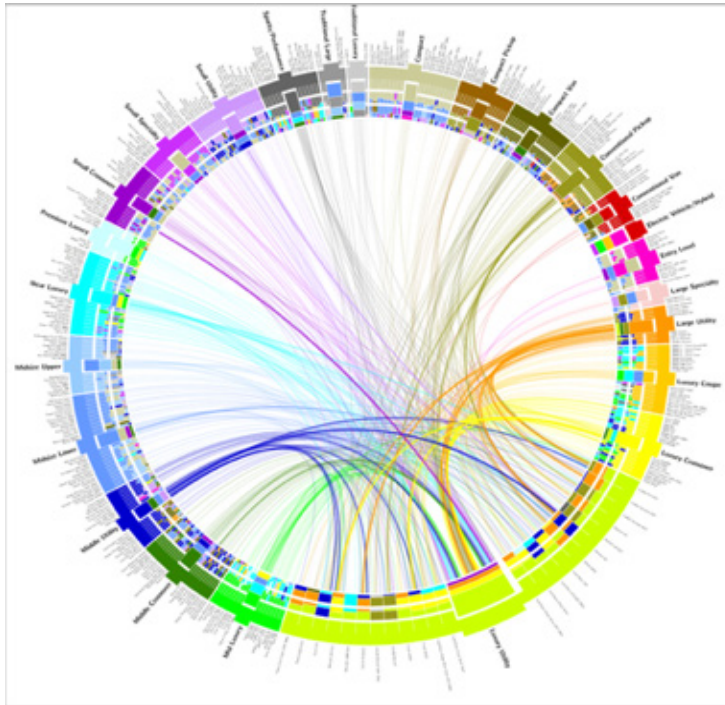


Fig. 9 - Distribution of the different types of actions related to the term 'Andrea Camilleri' on the various types of services, physical and digital, in the library "space".

The visualisation model, depicted in fig. 9 in a simple and synthetic manner, could however be much more analytical, like for instance what the example shows (Fig. 10), made with Circos visualisation software⁵¹ (<http://circos.ca/>), which allows circular representation models, originally made to visualise genome features and used for many types of complex data. The demand we have identified and attempted to give an answer to, stemmed from the fact that «new approaches in data modeling and analysis need to be accompanied with corresponding innovations in the visualization of these data. To mitigate the inherent difficulties in detecting, filtering, and classifying patterns within large data sets, we require instructive and clear visualizations that (1) adapt to the density and dynamic range of the data, (2) maintain complexity and detail in the data, and (3) scale well

⁵¹ Circos is a visualisation software created to identify and analyse comparative features in genome structures: cf. MARTIN KRYWINSKI - JACQUELINE SCHEIN - INANC BIROL - JOSEPH CONNORS - RANDY GASCOYNE - DOUG HORSMAN - STEVEN J. JONES - MARCO A. MARRA, *Circos: an Information Aesthetic for Comparative Genomics*, «Genome Research», 19, 2009, 9, p. 1639-1645. DOI: 10.1101/gr.092759.109.

without sacrificing clarity and specificity»⁵².



*Fig. 10 - Car choice criteria listed by market sectors and brands.
Source: <http://circos.ca/intro/general_data/>.*

Therefore, as previously stated in the opening paragraph, with this methodology, here very briefly outlined, we may have a very important visual tool to evaluate how library space responds, with different languages, to the solicitations it is submitted to each time. So the impact takes on a centripetal and not a centrifugal direction: what is important is to look for the effects of actions on the library's - physical digital and metaphorical - surface, and not to look for the traces the library left on the outside, passing through the mental representations people create and on which they base further actions.

In an experience, carried out at Teton County Library (<<http://tclib.org/>>), the searches users conducted on the catalogue are visualised on approximately 1000 optical fibres (for a total of 5 miles of cables), associated to 1000 categories of knowledge contents (Fig. 11).

⁵² Ibidem.



Fig. 11 - The fibres of Teton County Library visualise, based on 1000 categories-taken from CDD, searches performed by users on the catalogue.

Source: < <http://collabcubed.com/2013/04/01/filament-mind-teton-county-library/> >.

Finally, we shall here briefly sum up the different types of information we shall use in the evaluation:

- *Sources relative to the project and its realisation*
 - Sources and documents on the architectural and librarian project (preliminary, definitive and executive project; librarian planning documents; administrative instruments and resolutions).
 - Sources referred to the debate connected with the project definition and its results (in-depth analysis on periodicals, websites, blogs etc.).
- *Previous tools for services measurement and evaluation*
 - Quantitative analyses;
 - Qualitative analyses.
- *New analyses made*
 - Observation of space usage;
 - Questionnaire, submitted to users, librarians, interested subjects;
 - Analysis of digital data.

In the end we shall have a series of data and very heterogeneous information at our disposal. The goal is to examine it all, in order to

account for the multiple viewpoints of the different actors involved, trying to identify the actual key-factors in the process studied, and producing in the end an *account* on its comprehensive development. For digital data, once the difficulties with their acquisition are overcome, we will test analysis and visualisation techniques able to express the relationships network they are a part of.

6. A willful outlook

In 1974, forty years ago, Georges Perec sat for three days at a table in a bar in Place Saint-Sulpice, in Paris 6th *arrondissement*, gazing at the space around him: the square, a girl passing by (Fig. 12), changing weather conditions, the number of a bus driving by, the way in which a punter is holding a cigarette between the fingers of his hand, and a young woman's dress, the colour of a car, the changing shape of clouds⁵³.



Fig. 12 - A little girl crossing Place Saint-Sulpice, 1974
Photograph by Pierre Getzler (courtesy of Voland edizioni)

Dressing with obstinate determination, by his own choice, the mythical part of *Funes el memorioso*, Perec is at the same time witness and guinea pig of an extraordinary experiment. He single-mindedly

⁵³ An account of these observations can be found in *Tentative d'épuisement d'un lieu parisien*, with photographs by Pierre Getzler, published on the magazine «Cause commune» in 1975 and then by publisher Christian Bourgois in 1982.

applies the question about what and how we observe and interpret reality to his specific phenomenological field. And he does so – thus turning his experience into a testimony – stubbornly, and endearingly, trying to understand; he exposes the observer's limits in all their anthropological and epistemological frailty. Hence he directly confronts, with no alibis nor mediations, the experience of complexity. This reference to Perec basically is intended to invite readers, members of a niche interpretative community, not to lose sight of the fact that the topics, here examined since they belong also to the disciplinary field of library science, are a fundamental and essential part of a wider set of problems, which share the same tensions, changes, criticality. Singling out, from this problematic field, a disciplinarily accomplished knowledge, is a difficult task, which must be embarked with careful attention. All this, from our specific point of view, must be first of all traced back to the blurry polysemy of the term and concept of 'book', that very familiar and yet elusive object which has occupied since its mythical origins the library's space; a polysemy that, if possible, has become even more blurred since the Gutenbergian book migrated to the more volatile and occasional form of swishing digital information. For this we must envisage, that is *see*, following perspectives that have always accompanied all speculation on the organisation of knowledge, and then define a library science that is both practical and interpretative, which is able to rediscover the multiple meanings attributed to the entities, marking the limits of the discipline: data, information, documents, books, digital objects, that can be reinterpreted according to their original purpose of artefacts developed to produce practices of cultural significance. And in this sense, finally, the visual representation of processes can be a viable cognitive help, as for instance the studies by Walter J. Ong (1912-2003) have effectively shown⁵⁴. It is thus necessary to reassert the indissolubility of relationships between the organisational and interpretative dimension of library science⁵⁵; they both have to learn to first of all recognise each other, aware of their own specific

54 Necessarily refer to *Orality and Literacy. The Technologizing of the Word*, London - New York, Methuen, 1982 and *Interfaces of the World. Studies in the Evolution of Consciousness and Culture*, Ithaca NY, Cornell University Press, 1977. On the relations between history of bibliographical thought, arts of memory, use of visual representation models, I dare refer to my *Le dimensioni della bibliografia. Scrivere di libri al tempo della rete*, con testi di Maria Cassella, Giovanna Balbi, Bianca Gai, Diego Arduino, Roma, Carocci, 2013, with special reference to contents in chapters 2 and 7.

55 Cf. in that sense G. DI DOMENICO, *Biblioteconomia, scienze sociali e discipline organizzative: un rapporto da ripensare*, in: *Una mente colorata. Studi in onore di Attilio Mauro Caproni per i suoi 65 anni*, promossi raccolti ordinati da P. Innocenti, curati da C. Cavallaro. 3 v., Manziana, Vecchiarelli; Roma, Il libro e le letterature, 2007, p. 495-511; contents recalled in chapter 1 in *Biblioteconomia e culture organizzative. La gestione responsabile della biblioteca*.

premises and ends, and especially mutually legitimate themselves. A professional practice rooted solely in the organisational axis cannot but yield techniques stiffened by aseptic conventionalism; just as an academic culture falling back on itself cannot but, tautologically and self-referentially, address only the few members that populate and form it, who knows for how long. A practical and professional library science which deliberately severs all connections with the history of ideas, and hence with library science, risks generating strategic errors of such a magnitude that, in the long term, may actually bring catastrophic effects for the group of disciplinary fields and subfields, which in books, documents, libraries, in all their discontinuous and morphing forms, find their area of more or less mediated application. There is no doubt that the research strand here briefly outlined is in its entirety quite complex⁵⁶. However, as is clear, it is not a deliberately pursued complexity, but it rather stems from the intrinsic nature of observable and observed phenomena. Moreover, as Alberto Salarelli effectively argues in his paper contained in this volume, the best research perspective for contemporary library science «consists first and foremost in seeking a type of model that can, or rather, that tries to respond appropriately to the complex needs of the contemporary world, avoiding solutions that are pre-packaged in terms of organizing spaces, services and functions and, at the same time, are reductionist on the plane of the dialectic between tradition and change»⁵⁷. The fact that these phenomena are, to our eyes, complex, is neither a good nor a bad thing in itself: we ourselves are continuously part of it, even if on most occasions we do not realise it, striving to achieve a clear and precise goal, which is, at the same time, a final and efficient cause of our actions. Thinking of the library as a growing organism, recalling Ranganathan's well-known and still popular metaphor cited in the epigraph, inevitably leads us to take on as a basic subject for a new outlook on libraries, not only ideology and technique, but also complexity, which is ultimately the stuff of life: for this we have to willfully persist to try and understand it.

(Translation by Jennifer Cooke)

⁵⁶ Dense and interesting, in this respect, the theories argued by EDGAR MORIN in *La voie: pour l'avenir de l'humanité*, Paris, Fayard, 2012, discussed by G. DI DOMENICO in the afore-mentioned *Conoscenza, cittadinanza, sviluppo*. Interesting considerations on the relations between libraries and digital eco-system are also proposed by GINO RONCAGLIA in *Social network e riconquista della complessità: il ruolo delle biblioteche*, «Biblioteche oggi», 32, 2014, 5, p. 4-8, <<http://www.bibliotecheoggi.it/2014/20140500501.pdf>>.

⁵⁷ A. SALARELLI, *Towards a Critique of the Concept of Model in Library Science*.